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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
| 08/606,233 | 02/23/96 | SLEMMER | 93-C-07C1 |

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| EXAMINER |
| CUNNINGHAM, T |

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| ART UNIT | PAPER NUMBER |
| 2504 | |

DATE MAILED: 01/15/97

#16

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

08/606,233

Applicant(s)

Slemmer

Examiner

Terry D. Cunningham

Group Art Unit

2504



☒ Responsive to communication(s) filed on Nov 13, 1996

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1, 4-14, and 17-30 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☒ Claim(s) 1, 4-14, 17-26, and 30 is/are allowed.

☒ Claim(s) 27-29 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Examiner has considered Applicant's response to the rejection to the claims under 35 U.S.C. § 112, first paragraph, and has found them to be persuasive. However, the following objections are now seen to be necessary.

The disclosure is objected to as being informal. Although, equation 1 on page 7 is now deemed to be enabled, there still remains some confusion therewith. Firstly, Applicant has pointed out where in the specification the terms, such as V_T and V_{BE} , of the equation are defined in the specification. However, it would seem proper for clear understanding the equation that definitions for the terms therein should be provided directly following the equation. Secondly, Applicant has stated that V_T is intended to represent the threshold of transistor M9, however, line 25 of page 10 states that " V_T is set up by transistor M9". This statement in the specification would not be clearly understood to provide the disclosure stated by Applicant. And thirdly, line 11 of page 10 states that "voltage V_{BE} is set up by transistor". However, this would not be understood to set forth that " V_{BE} " is the base-emitter voltage of transistor B3 as stated by Applicant and as now recited in the claims. Appropriate correction is required.

Claims 27-29 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 27, the equation therein is not understood due to the insufficient description of the terms therein. In line 5, the phrase " V_T is the predetermined threshold voltage level" is not at all understood. Firstly, there is no antecedent for this phrase. And secondly, this phrase does not state what this voltage is the "threshold" of. In line 8, it is not understood what " kT/q " is the "thermal voltage" of. Clearly, there are many elements provided in the disclosed circuit. This term clearly is not a "thermal voltage" for the overall circuit, especially since such is notoriously well as referring to the "thermal voltage" of a single element. In line 10, it is not states what the

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constants K_1 , K_2 and K_3 are related to. The specification clearly states that these constants are related to aspects of the circuit (i.e., the resistance and transistor scaling).

Claims 28 and 29 are rejected for the reasons discussed above with claim 27.

Claims 27 and 28 are rejected under 35 U.S.C. §102(b) as being anticipated by Bingham. Bingham discloses, in Figs. 1 and 3, a circuit comprising: "a first circuit (20 of Fig. 1)"; "a direct current sum bandgap voltage comparator (36 and 56 of Fig. 3)" having "a summing node (52 of Fig. 3)", "a plurality of current sources (110 and 116 of Fig. 3)" and "an indicator circuit (56 of Fig. 3)"; "a switching circuit (40 and 48 of Fig. 3)"; "a primary power supply (14 of Fig. 1)"; and "a secondary power supply (22 of Fig. 1)", all connected and operating similarly as recited by Applicant.

Examiner has considered Applicant's remarks for the above rejection, however, claim 27 does not even recite the equation discussed by Applicant. Also, since the terms for the equation in claim 28 still cannot be understood, it is not seen that such recitation can read over the prior art.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY

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ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Terry Cunningham at telephone number (703) 308-4872. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0956.

The fax phone number for Art Unit 2504 is (703) 308-7722. Please note, any faxed paper clearly stating **DRAFT** or **PROPOSED AMENDMENT** at the top will be forwarded directly to the Examiner. All others will be treated as a formal response and acted upon accordingly.

TC
January 7, 1997


Terry D. Cunningham
Primary Examiner
Group Art Unit 2504